PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

RECD 28 JAN 2004

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Applicant's or agent's file reference LAM/01030717	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).

International Application No. **PCT/SG2002/000130**	International Filing Date *(day/month/year)* 25 June 2002	Priority Date *(day/month/year)* 25 June 2002

International Patent Classification (IPC) or national classification and IPC

Int. Cl.^{7} G06F 17/60

Applicant

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1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

   [X] This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 4 sheet(s).

3. This report contains indications relating to the following items:

   I   [X] Basis of the report

   II   [ ] Priority

   III [ ] Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

   IV   [ ] Lack of unity of invention

   V   [X] Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

   VI   [ ] Certain documents cited

   VII [ ] Certain defects in the international application

   VIII [ ] Certain observations on the international application

Date of submission of the demand 6 November 2003	Date of completion of the report 14 January 2004
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer **R.H. STOPFORD** Telephone No. (02) 6283 2177

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

I.	Basis of the report

1. With regard to the **elements** of the international application:*

☐ the international application as originally filed.

☒ the description, pages **1-13,** as originally filed,

pages , filed with the demand,

pages , received on with the letter of

☒ the claims, pages , as originally filed,

pages , as amended (together with any statement) under Article 19,

pages , filed with the demand,

pages **14-17,** received on **6 November 2003** with the letter of **28 October 2003**

☒ the drawings, pages **1-3,** as originally filed,

pages , filed with the demand,

pages , received on with the letter of

☐ the sequence listing part of the description:

pages , as originally filed

pages , filed with the demand

pages , received on with the letter of

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

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* *Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

** *Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report*

V. **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	**1-16**	**YES**
	Claims		**NO**
Inventive step (IS)	Claims	**1-16**	**YES**
	Claims		**NO**
Industrial applicability (IA)	Claims	**1-16**	**YES**
	Claims		**NO**

2. Citations and explanations (Rule 70.7)

    <u>Novelty, Inventive Step, Industrial Applicability (Yes) Claims 1-16</u>

    "Join the Club : Enabling Self-Organizing Groups on the Net", S Fickas et al, Archived 5 June 2001 [http://web.archive.org/web/20010605100945/http://www.igec.umbc.edu/kbem/final/fickas.pdf]

    The citation does not disclose generation of groups having mutually selected participants, consequently the claims are seen as being novel, having an inventive step and to be industrially applicable.

CLAIMS

1. A method to generate a group of entities from a
    plurality of participating entities, said method
    comprising:

    (a) One of said participating entities expressing by
         indication which others of said participating
         entities they wish to meet;

    (b) Selecting to be a first member of the group an
         entity which has indicated at least one other of
         said participating entities it wishes to meet;

    (c) Adding a new entity to the group by selecting
         said new entity from the set of indications of
         the last member added to said group.

2. The method of Claim 1 wherein the set of indications
    of an entity are the set of other entities that said
    entity indicated it is interested in meeting.

3. The method of claim 1 or claim 2 further comprising:
    repeatedly adding new members until at least one
    indication of the set of indications of the last new
    member added to said group includes one of the current
    members of the group.

4. The method of any one of claims 1, 2 or 3 further
    comprising using a look ahead method of choosing which
    one of the set of indications to choose from the last

new member where the look ahead consist of N generations.

5. The method of Claim 4 wherein the first generation is the set of indications of the last new member and the Nth generation is the set of entities combined from the set of indications of all of the entities of N-1 generation.

6. The method of Claim 5 wherein if one of the entity (named X) from the first generation to the N generation is a member of the group, then the look ahead has succeeded and the new members added to the group will consist of the set of entities that follows the link of indications from the last new member to the entity that has said entity named X as a member of its set of indications.

7. The method of Claim 1, 2 or 3 further comprising using a look back method of choosing which one of the set of indications to choose from the last new member where the look back consists of N generations.

8. The method of Claim 7 wherein the first generation is the set of entities whose set of indications includes at least one of the current members of the group and the Nth generation is the set of entities whose set of

indications include one of the entity of the N-1 generation.

9.   The method of Claim 8 wherein if one entity (named X) from the first generation to the N generation is also the last new member of the group, then the look back has succeeded and the new members added to the group will consist of the set of entities that follows the link of indications from the last new member which is also said entity named X back to the first generation of the look back.

10.   The method of any previous claim further comprising a combined look ahead and backwards; said method consisting of looking ahead N generations and looking backwards M generations where if there is an entity X that is common to the look ahead from 1 to N generations and the look back is from 1 to M generations, then the combined look ahead and backwards has succeeded and the new members added to the group will consist of the set of entities that follows the link of indications from the last new member to X and from X to the first generation of the look back.

11.   The method of claim 10 further comprising repeatedly increasing N and M by steps of amount N1 and M1 until

the combined look ahead and backwards has succeeded or

N or M equal or exceed a predetermined value.

12. The method of any previous claim wherein the entities

under consideration are already pre-selected for in

terms of having already indicated a common time and a

common place to meet.

13. The method of any previous claim further comprising

stopping the process of generation of new members of

said group when the quantity of members of the group

reaches a predetermined quantity.

14. The method of any one of claims 1 to 13 wherein the

entities are people.

15. The method of any one of claims 1 to 13 wherein the

entities are corporations or a combination of

corporations and people.

16. A system to generate groups to meet for the purpose of

enabling participating entities to meet others of said

participating entities more effectively, the system

comprising:

a computer readable storage medium;

linkages to said participating entities by

input/output devices;

wherein the particulars of said participating entities

and indications can be fed in and stored in the

computer readable storage medium and resultant groups
generated posted to the entities via the same
input/output devices; and computer programming stored
on the storage medium.

17. The system of Claim 16 wherein the computer
programming stored on said system is configured to be
readable from the computer readable storage medium by
a computer and thereby cause the computer to operate
so as to:

pick an entity to be the first member of the group;

add a new entity to the group by picking it from the
set of indications of the last new member of group,
where the set of indications of an entity are the set
of other entities that an entity indicated it is
interested in.

18. The system of Claim 16 or Claim 17 wherein the process
of generating groups is stopped when the quantity of
the member of the group equals or exceeds a specific
quantity.

19. The system of any one of Claims 16, 17 or 18 wherein
the stored computer programming is further configured
to cause the computer to operate so as to:

repeatedly add new members until the set of indications of the last new member include one of the current member of the group.

20. The system of claim 19, wherein the stored computer programming is further configured to cause the computer to operate as to:

use a look ahead method of choosing which one of the set of indications to choose from the last new member where the look ahead consist of N generations.

21. The system of Claim 20 wherein the first generation is the set of indications of the last new member and the Nth generation is the set of entities combined from the set of indications of all of the entities of N-1 generation.

22. The system of Claim 21 wherein if one of the entity named X from the first generation to the N generation is a member of the group, then the look ahead has succeeded and the new members added to the group will consist of the set of entities that follow the link of indications from the last new member to the entity that has X as a member of its set of indications.

23. The system of any one of claims 16 to 19 wherein the stored computer programming is further configured to cause the computer to operate so as to:

use a look back method of choosing which one of the set of indications to choose from the last new member where the look back consists of N generations.

24. The system of Claim 23 wherein the first generation is the set of entities whose set of indications includes at least one of the current members of the group and the Nth generation is the set of entities whose set of indications include one of the entities of the N-1 generation.

25. The system of Claim 24 wherein if one of the entities now named X from the first generation to the N generation is also the last new member the group then the look back has succeeded and the new members added to the group will consist of the set of entities that follows the link of indications from the last new member which is also X back to the first generation of the look back.

26. The system of any one of Claims 16 to 19 wherein the stored computer programming is further configured to cause the computer to operate so as to:
have a combined look ahead and back; said system consisting of looking ahead N generations and looking backwards M generations where if there is an entity X that is common to the look ahead from 1 to N

generations and the look back from 1 to M generations then the combined look ahead and back has succeeded and the new members added to the group will consist of the set of entities that follow the link of indications from the last new member to X and from X to the first generation of the look back;

27. The system of Claim 26 repeatedly increasing N and M by steps of amount K until the combined look has succeeded or N or M exceed a given value.

28. The system of any one of Claims 16 to 27 wherein the stored computer programming is further configured to cause the computer to operate so as to:

    enable the entities under consideration to be pre-selected for in terms of having already indicated a common time and place.